ATTACHMENT G – PUBLIC COMMENT CORRESPONDENCE

Table of Contents

ATTACHMENT G – PUBLIC COMMENT CORRESPONDENCE

I. GRANITE ROCK ARTHUR WILSON – EMAIL COMMENTS APRIL 26, 2010

Cecile DeMartini - Graniterock WDO renewal questions

From: Tina Lau <tlau@Graniterock.com>
To: CDeMartini@waterboards.ca.gov
Date: Monday, April 26, 2010 9:20 AM
Subject: Graniterock WDO renewal questions
CC: ajohnstonkaras@Graniterock.com

Hi Cecile,

Thanks for checking on the possibility of moving the hearing date, I appreciate that. I agree with you, having the permit on the consent decree would be the best! To achieve that goal and to ensure a smooth process, we should make sure we're on the same page about how the permit should look ahead of the hearing date (whenever it may be). Below are some questions and clarifications I had. As I mentioned, this is just the initial round of questions; I'm still furthering my understanding on some other aspects of the permit, and your responses below will help me with that. Also, I think breaking down the issues into smaller bits like this makes the communication trail easier to follow.

- In Attachment E, Section V, Table E.3, the table notes that the testing should last for 7 days and track Larval Survival and Growth. However, Acute Toxicity is for 96 hours and tracks only survival. I suspect there was some mix-up with chronic testing requirements. Can we modify the protocol to reflect acute testing requirements? Similarly, item B.5 in that section mentions test sensitivity assessment through calculating PMSD. However, I checked with our lab and they noted that PMSD testing is for chronic testing, and is not part of the EPA methodology for acute testing. Can we remove the PMSD standard?

- As part of our application, we included a list of tentative effluent limits that we calculated per the SIP guidelines. Reading through Attachment F, it appears that you have been using the same guidelines. Yet our results are significantly different! This will take some detective work, so if you send over your calculations I can compare them against ours, and figure out for us where the discrepancies are.

- On Page F.17, there is a question about our use of the average Pajaro River flow during the wet season as the basis for calculating the dilution ratio. The Fact Sheet states that "Additional analyses would be required to determine how this average flow relates to the critical flow period that would be necessary for protection of aquatic life and human health as identified in the SIP." What type of analysis does the Board want to see? The SIP notes that when determining the appropriate available receiving water flow, we may take into account actual and seasonal variations of the receiving water and the effluent (page 15). Since any discharge would most likely occur during the wet season, it seemed reasonable that the wet season flow would be the most appropriate flow. However, I would be happy to develop further analysis to satisfy the Board, please let me know what type of assessment you're looking for.

- Table F.6 in Attachment F summarizes the Reasonable Potential Analysis (RPA) results. Please note we are not entirely clear about the RPA treatment and determinations especially for our minor, rare and seasonal discharge, and we're still assessing the methodologies. But an initial review shows that the RPA analysis concludes that some of the constituents do not cause, have the reasonable potential to cause, or could contribute to an excursion above the water quality criteria. Accordingly, some of these constituents do not show up in the effluent limit list. Yet there is an effluent limit attached to some of these no-risk constituents (specifically Antimony, Arsenic, Cadmium, Chromium (VI), Copper, Nickel, Silver, and Zinc) and some effluent monitoring requirements attached to others (Chloride, Boron, Sodium). It seems like there's a discrepancy in the way the no-risk pollutants are presented, and they should be pulled from the effluent limits list and the effluent monitoring list.

- Additionally, the RPA notes that no other pollutants with applicable numeric water quality criteria

from the NTR, CTR, and the Basin Plan (including the Title 22 pollutants) were measured above detectable concentrations. If the constituent is not detected in our effluent source water (which can only present a worse case representation of actual discharge, since actual discharge would have a higher portion of rain water and we would thus expect the concentrations to be even lower) or in the receiving water body, then we are having difficulties understanding how a determination could find that our discharge can cause, have the reasonable potential to cause, or could contribute to an excursion above the water quality criteria. That is, we do not understand how there can be effluent limits attached to constituents for which our discharge does not cause, have the reasonable potential to cause, or could contribute to an excursion above the water quality criteria.

- It appears that there was a waste load allocation set for us through the TMDL program. I remember that there was some confusion initially as to how to calculate the WLA, so I would appreciate seeing how these numbers were derived. Can you send over the TMDL calculations?

- Finally, we are surprised to see limits for total mercury and other metals, instead of the dissolved concentrations. We thought this issue was thoroughly resolved during the last permit renewal, and in the referenced water quality documents (i.e. CTR, SIP). The use of total metal concentrations is not representative of toxic effects of many metals; as noted in the CTR, “use of dissolved metal to set and measure compliance with aquatic life water quality standards is the recommended approach, because dissolved metal more closely approximates the bioavailable fraction of the metal in the water column than does total recoverable metal.” (page 10 of the CTR, or page 31,690 of the Federal Register in which the CTR is located). Further, the hundreds of toxic tests preformed to develop the ambient standards necessitated the addition of salts and acids to convert the metals into dissolved (hence toxic) forms. Is there another source document the Board is using to establish the new requirements for total metal concentrations or were translators for the total metals not included in the permit calculations?

I look forward to hearing from you, and thank you in advance for your time.

Cheers,

Tina

II. GRANITE ROCK ARTHUR WILSON –COMMENT LETTER MAY 13, 2010

Graniterock®

MATERIAL SUPPLIER / ENGINEERING CONTRACTOR • LICENSE #22

May 13, 2010

California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California

Dear Cecile DeMartini and Members of the Board:

We respectfully submit the following comments regarding the proposed waste discharge requirements for Graniterock's A.R. Wilson Quarry in Aromas, complementing our emailed request for clarification submitted on April 23, 2010 and responded to on May 12, 2010. Please note that there have been significant changes in this proposed permit compared to the existing permit, and as such our comments are detailed and substantive in responding to the new requirements and expectations. We regret that the Regional Board would not grant an extension of the comment period initially. We now request that you delay the hearing to accommodate the many unresolved issues we have been unable to fully address by today.

I. WQBELs are not needed for the majority of pollutants to protect the beneficial uses of the Pajaro River

Many effluent limits in this permit are inappropriately included and are unsupportable at this time. The Fact Sheet notes that "because sufficient monitoring data is not available that is representative of the effluent discharged to the Pajaro River, the Regional Water Board finds that there is a reasonable potential to cause or contribute to water quality criteria for all pollutants with applicable water quality criteria from the CTR and NTR" (emphasis added, Fact Sheet, p. F-15).

Graniterock concurs with the Board that there may be insufficient data that is representative of effluent discharged to the Pajaro River. There is insufficient data because of the lack of discharged effluent. Graniterock has made numerous and costly improvements to its equipment and facility processes to increase the re-use of the recycled water and rain water in order to

minimize the frequency and the volume of discharges as much as possible. For example, Graniterock has installed a system of pumps and piping that diverts storm water runoff away from the recycled water system, thus increasing the system's ability to contain recycled process water and minimize discharges. There also have been several years of drought during this previous permit's term, which may also contribute to the lack of discharge. While zero discharge is in essence "perfect" water quality, this has resulted in a lack of representative water quality data.

The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) has guidance in place for when there is insufficient data:

> If data are unavailable or insufficient, as described in section 1.2, to conduct the above analysis for the pollutant, or if all reported detection limits of the pollutant in the effluent are greater than or equal to the C value, the RWQCB shall require additional monitoring for the pollutant in place of a water quality-based effluent limitation (SIP, p.5).

Thus, if the Board does not believe there is sufficient data, then adherence to the SIP would not allow the establishment of water quality based effluent limits (WQBELs). Instead, monitoring data that is representative of the effluent would need to be collected so that accurate, scientifically defensible effluent limitations can be established.

Graniterock would support the establishment of a monitoring program to collect representative data that is necessary for the development of scientifically defensible effluent limits that are in line with the SIP. In fact, at the Board staff's direction in the past, we have conducted analyses on concentrated process waters that did not have the benefit of rain water dilution (which we would expect to a large proportion in an actual discharge scenario). We believe that this permit can be used as one way to obtain such representative effluent data, and would willingly work with the Board to develop a clearly defined, scientifically sound sample collection program. However, we cannot support the assignment of numeric effluent limits for all CTR and NTR constituents based on insufficient and non-representative data.

If the Board chooses to utilize the insufficient and non-representative data in its assessment of whether water quality based effluent limitations are necessary, then Graniterock requests the Board follow the conclusions of the Reasonable Potential Analysis, performed per the SIP as described in the Fact Sheet. The SIP outlines the scenarios in which an effluent limit would be appropriate:

1. When the observed maximum pollutant concentration for the effluent (MEC) is greater than the (most stringent) water quality criterion or objective for the pollutant applicable to the receiving water (C).
2. When the maximum ambient background concentration for the pollutant (B) is greater than the C and the pollutant is detected in the effluent
3. Review other information available to determine if a water quality-based effluent limitation is required, notwithstanding the above analysis in *Steps 1* through *6*, to protect beneficial uses.

The Board appeared to have followed the SIP steps in determining whether there was reasonable potential for a pollutant to cause or contribute to an excursion; Table F-6 in the Fact Sheet outlines the results. The Board's RPA demonstrated that for the majority of pollutants, Graniterock's discharge does not have the reasonable potential to cause or to contribute to an excursion above the most stringent water quality standard. That is, the Board's study concluded that WQBELs are not needed for the majority of pollutants to protect the beneficial uses of the Pajaro River.

Then, disregarding the conclusions of their own analysis, the draft Order imposes effluent limits even for those pollutants for which there is no reasonable potential to cause or to contribute to an excursion above the most stringent water quality standard.

Graniterock recognizes that the SIP allows the Board to use other information available to determine if a WQBEL is needed to protect beneficial uses. However, we have not been supplied with any such information even after our requests. It is recognized by the Board that Graniterock is a low volume discharge, and thus by definition would likely not have a significant adverse impact on water quality. We are identified in the permit as a low-volume discharger on the first page, we believe in recognition of the infrequent forces of nature that would force a discharge and of the minimal quantities discharged. Our discharge is rare, and is of a minor volume relative to the likely conditions of the Pajaro River; as previously discussed with the Board, our discharge volume would comprise of about 0.2% of the Pajaro River flow at a flood stage of 25 feet. Graniterock does not have a history of compliance problems and many of the sample results, even those analyzing undiluted process water, have "non-detected" levels of the pollutants. In addition, whole effluent toxicity testing data has not suggested toxic impacts from our discharge. In short, there is no additional information that would suggest that WQBELs are needed to protect beneficial uses.

The Fact Sheet notes that the Board has chosen to implement WQBELs apparently because the Board does not feel there is sufficient monitoring data. This reasoning is in contrast to Step 7 of the SIP for assessing WQBEL applicability, which allows for the Board to use additional data in its decision for requiring WQBEL but it does not allow for the Board to use a *lack* of data as a basis to decide to include limits. In fact, as noted above, if there is insufficient data then the SIP requires additional monitoring instead of imposing WQBELs.

In short, the Board must take one path or the other: either the data are insufficient and additional monitoring is needed instead of WQBELs, or the data are sufficient to assess the need for WQBELs, in which case the results of the RPA should be upheld.

The WQBELs contained in this Draft Permit are not supported by findings, and the findings made are not supported by evidence. The arbitrary application of WQBELS is clearly in conflict with the following decisions requiring that the Board's decisions be based on findings supported by evidence in the record: *Topanga Association for a Scenic Community v. County of Los Angeles*, 11 Cal.3d 506, 515; *California Edison v. SWRCB*, 116 Cal. App.3d 751, 761 (4th Dt. 1981); *see also In the Matter of the Petition of City and County of San Francisco, et al.,* State Board Order No. WQ-95-4 at 10 (Sept. 21, 1995).

II. The Draft Order's denial of dilution credits criteria is not compatible with SIP Section 1.4.2.1

The Fact Sheet bases a denial of Graniterock's request for dilution credits for certain pollutants on the belief that Graniterock does not need them due to our infrequent discharges that are compliant with effluent limits. However, dilution credits assessment should be conducted independently of the frequency of discharge. Considerations of historical compliance with effluent limitations should also be limited because it ignores uncontrollable circumstances that may affect future compliance, such as the amount of rain fall we receive.

The evaluation of dilution credits should not be separated from the identification of source of the constituent (in our case, groundwater) nor should it ignore mass balancing principals and pollutant loadings from natural processes. While we appreciate the recognition of the low risk posed by our discharge, Graniterock believes that, in fact, we do need the dilution credit to properly account for the facility's current conditions, which are different than those under the previous permit application, and for changing natural conditions.

The Fact Sheet's denial of dilution credits appears to rest upon mistaken assumptions. It appears to be based in part on the previously proposed expansion of Soda Lake and thus of our facility's increased storage capacity and subsequent reduction in discharge potential. In fact, the Soda lake expansion will no longer take place. After several years and hundred of thousands of dollars of permitting and environmental assessment costs, the project application has been terminated by the County. It is highly unlikely that the Soda Lake expansion will take place in the foreseeable future. Therefore Graniterock anticipates having less, not more, storage capacity for the term of this permit, and expects the chances of discharge to increase.

In addition, the decreased storage volume will lead to an increase in potential pollutant loading: less storage means we can hold less storm water. We will need to rely more on our intake water source, the Orchard Well. We would get less dilution of the naturally occurring pollutants found in the groundwater because we have less storage space for additional storm water. If we were to discharge, the proportion of well water would be higher than previously anticipated; the makeup of the discharge would look more like the groundwater and less like rain water.

The Orchard Well has been shown to not comply with past limits, specifically mercury, Total Dissolved Solids (TDS), chloride, sulfate, boron, and sodium. We would thus expect to see more concentrations of pollutants in our discharged effluent. We are also likely to see more normal rain patterns in the future compared to the multi-year drought cycle we have seen for the majority of previous permit's term. In short, we anticipate having less capacity, less rain water in the discharge water, and believe that discharges would be more frequent in the future.

Even if there were not a need for the dilution credit, the SIP does not support denial of a dilution credit due to speculative circumstances. Instead dilution credits must be evaluated relative of risk to water quality objectives. The SIP notes that:

> The RWQCB shall deny or significantly limit a mixing zone and dilution credit as necessary to protect beneficial uses, meet the conditions of this Policy, or comply with

> other regulatory requirements. Such situations may exist based upon the quality of the discharge, hydraulics of the water body, or the overall discharge environment (including water column chemistry, organism health, and potential for bioaccumulation).

The SIP allows for dilution credit denial if there is a risk to the beneficial use or to compliance; denial should be based on scientific, objective parameters and not on a subjective interpretation of need that fails to consider the threat (or lack thereof) to beneficial uses. Again, the findings do not support the conclusions noted in the current draft of the Order and are inconsistent with past court decisions.

In addition, the Fact Sheet suggested that additional analyses need to be done. It noted that dilution credits are on a pollutant-specific basis, and argued that thus an acute toxicity test is needed for each and every pollutant. The SIP does require that dilution credits are pollutant-specific. In fact, Graniterock calculated and submitted with its Report of Waste Discharge a pollutant by pollutant assessment of dilution credit applicability. We provided details about our calculations in our application submitted on January 8, 2010, in which we described our pollutant-by-pollutant comparison of background concentrations against the most stringent water quality criteria. We also included our calculations of pollutant specific dilution credit values and the subsequent calculated effluent limits of each pollutant for which dilution credits apply.

While dilution credits are assessed pollutant-by-pollutant, we do not believe that a pollutant specific toxicity test is necessary (given the testing already completed); nor is it required under the SIP. When conducting toxicity tests, organisms are placed in the whole effluent water and monitored (i.e. for percent survival, reproductive rates, growth rates, etc). If no toxicity is observed in the whole effluent testing (as is the case with Graniterock's results), then it is highly unlikely toxicity would be observed in a pollutant specific testing. Such targeted testing would be redundant. In addition, we are not convinced that pollutant specific toxicity testing is even required under the SIP.
Section 1.4.2.2 of the SIP states:

> A mixing zone shall not:
> (1) Compromise the integrity of the entire water body;
> (2) Cause acutely toxic conditions to aquatic life passing through the mixing zone;

While dilution credits are granted on a pollutant specific basis, mixing zones are calculated based on the total effluent flow and total receiving water body flow. The SIP does not require or expect discussion of an individual pollutant's impact on mixing zone toxicity. The language in the SIP demonstrates that the concern is with the toxicity of the mixing zone as a whole. Graniterock's past toxicity results have shown (as submitted in our renewal application) that our effluent is not expected to cause acutely toxic conditions to aquatic life or to compromise the integrity of the water body. This is especially true in light of the relatively miniscule proportion our discharge flow would have relative to the Pajaro River volume.

The Fact Sheet also notes that the toxicity testing of the actual effluent in December 2001 was for chronic toxicity, not acute toxicity, and requests that additional acute toxicity data of actual effluent discharged be conducted. Graniterock agrees that analysis of effluent that was actually

discharged is the most representative data and is most appropriate for this type of analysis. In fact, the toxicity data from December 2001 was from a discharge event, and as such should be the focus of this assessment. This testing was for chronic toxicity, which requires the target species be immersed in the effluent for 6-7 days. This is more likely to expose a toxic effect and, when factoring in the infrequent and minor volume of our discharge, represents a highly cautious approach. Conversely the acute toxicity testing lasts only for 96-hours. Based on our discussion with a toxicity testing laboratory, chronic toxicity testing should capture acute toxicity impacts as well, given the increased and overlapping testing timeframe. This is especially true since the chronic toxicity requested by Graniterock for this discharge event included percent survival, which is the same end-point for acute toxicity. In short, we would expect that any toxic impacts that would show up in an acute toxicity test would also appear in a chronic toxicity test. Thus, we believe that it is fitting to use the chronic toxicity testing from the actual discharge event in December 2001 to demonstrate our discharge's lack of potential toxic impacts to the Pajaro River.

The Fact Sheet also had a comment about our recommended use of the average Pajaro River flow during the wet season as the basis for calculating the dilution ratio. Specifically, the Board noted that "additional analyses would be required to determine how this average flow relates to the critical flow period that would be necessary for protection of aquatic life and human health as identified in the SIP." The critical flows identified in Table 3 of the SIP are for year-round dilution credit models. The facility retains and re-uses water on site, and only discharges when rainfall intensity and/or frequency exceed our Quarry Storage Reservoirs' capacity above a safe level. Since the facility's discharge is most likely to occur during the rainy season, we do not believe a year-round dilution credit is necessary. Instead, we believe that using a rainy season flow would be the best in modeling mixing zones for this facility.

In section 1.4.2.1 of the SIP, it states: "in determining the appropriate available receiving water flow, the RWQCBs may take into account actual and seasonal variations of the receiving water and the effluent. For example, a RWQCB may prohibit mixing zones during seasonal low flows and allow them during seasonal high flows." Again, our discharge would likely be during a seasonal high flow. As described in our original application, Graniterock employed a rainy season scenario for our model and researched flows within the Pajaro River during the rainy season, defined as October 1st through May 31st in the General Storm Water Permit. We believe using this rainy season average flow is the most appropriate because it models the behavior of the Pajaro River in the time period we would most likely discharge. In addition, it is protective of the water body because it includes the low flow periods typically expected at the start and end of the rainy season (October/ September, and April/May, respectively) when there is less rain than in the middle of the rainy season, and when we would expect not to discharge.

III. SIP Allows for Intake Credits for the Orchard Well Intake Water

The Fact sheet has denied Graniterock's request for intake credits for constituents contained in intake water from the Orchard Well, citing several reasons. The first reason is noted in the Fact Sheet:

> "However, according to the Report of Waste Discharger (top of page 2 in the Form 200 Appendix), "*Intake from the Orchard Well rarely occurs during the wet season, as its use is inversely proportional to rainfall inputs.*" Therefore, intake credits are being requested during the season when Orchard Well water is not likely to be present in the discharge.

This is factually incorrect. Because the facility continually recycles, some water from the Orchard Well will *always* be present in the discharge. The water from the Orchard Well is intermingled with the existing water and as such is always a part of the water that is re-used; there is no mechanism that removes Orchard Well water from the discharge during the rainy season. The discharge water will always have a fraction of Orchard Well water in it, and this fraction varies with the season and the amount of rain fall experienced.

The second reason for denying the credit appears to be rooted in an assumption that there needs to be a method of calculating the exact ratio of Orchard Well water in the discharge for intake credits to be applicable. However, the SIP does not appear to support this interpretation.

The Fact Sheet describes the discharge water as being composed of recycled water, Orchard Well water, and rainfall. However, this definition should be clarified. Recycled water is a component of the discharge water, and it also *is* the discharge water at this site. The recycled water is composed of accumulated rainfall and Orchard Well water over the years of plant operation, and it is this water that is continuously re-used in operations (including the Fines Treatment Plant). Thus, recycled water (which is supplemented by and composed of rainwater and Orchard Well water) is the water that discharges from Quarry Storage Reservoir.

Graniterock concurs with the Board that intake credits are not applicable for the other source of water at the Quarry Storage Reservoir (i.e. rainfall) if the CTR is strictly followed (although this appears to be an admission that even rain runoff could not comply with effluent limits proposed). But we are not requesting intake credits for rainfall runoff at this time. We are only asking for intake credits for the Orchard Well. The Fact Sheet notes that:

> In addition, Section 1.4.4 of the SIP states: '*Where a facility discharges pollutants from multiple sources that originate from the receiving water body and from other water bodies, the RWQCB may derive an effluent limitation reflecting the flow-weighted amount of each source of the pollutant provided that adequate monitoring to determine compliance can be established and is included in the permit.*' Therefore, application of intake credits would require that each source be characterized prior to a discharge event so that the relative contribution from the Orchard Well could be quantified to allow for accurate flow-weighting.

Per the SIP, flow-weighting may be appropriate when a facility receives a pollutant from multiple sources, and an intake credit is needed for each of these multiple sources. However, Graniterock is not requesting intake credits from multiple sources; we are only requesting intake credits for the contribution of pollutants from one source: the Orchard Well. The other potential source of pollutant this site is rainfall which, unlike the Orchard Well, is not a source that originates from the receiving water body (although without our operation would flow to the receiving water unchecked). In addition, we do not anticipate rainfall to have a significant impact

on the pollutants for which we are requesting intake credits, unless atmospheric deposition increases (for example, of mercury as studied by the San Francisco Bay Atmospheric Deposition Pilot Study). Regardless, we are only requesting application of intake credits from a single source, and flow-weighting as described in the SIP is not necessary or appropriate.

It appears that the third reason the Fact Sheet denies Graniterock's request for intake credits is based on the argument that "*intake water characteristics are significantly altered through recycling, reuse, treatment, and commingling with storm water before discharge*" (emphasis added).

While we were unable to find an excerpt from the SIP that exactly matches the prohibition against altering intake water characteristics implied by the above statement, Graniterock found the following prohibition on page 19 of the SIP:

> (4) The facility does not alter the intake water pollutant chemically or physically in a manner that adversely affects water quality and beneficial uses; and

There is no prohibition in the SIP against any alteration of the intake water; the prohibition is against altering the intake water *pollutants* in such a way to adversely affect water quality. The pollutants for which Graniterock is requesting intake water credits (i.e. mercury, Total Dissolved Solids (TDS), Chloride, Boron, Sodium, and Copper) are not chemically or physically altered by the facility's manufacturing process. For example, there is no mechanism in the Quarry Storage Reservoir to increase metal toxicity found in the intake water stream. Even if alterations of these pollutants were to occur, any such potential alterations would not adversely affect water quality. For example, some chemical reactions with clays may reduce the availability of trace metals but would not adversely affect water quality. If anything, the co-mingling with storm water before discharge would likely have a positive effect on water quality and beneficial uses compared against the original intake water.

Based on our analysis, we believe that the denial of Graniterock's request for intake credits is not supported by the SIP or the evidence at hand, and is inconsistent with past court decisions (see previously referenced citations). We thus request the Board reconsider this decision.

IV. CTR and NPDES Regulations Support Use of Dissolved Metals to Assess Impact and Compliance

Graniterock would like to reiterate the point that any effluent limitations established for metals should be in the dissolved form, and not the total form. **The use of total metal concentrations is not representative of toxic effects of many metals; as noted in the CTR, "use of dissolved metal to set and measure compliance with aquatic life water quality standards is the recommended approach, because dissolved metal more closely approximates the bioavailable fraction of the metal in the water column than does total recoverable metal" (CTR p.10).**

While, as noted in the Board's May 12, 2010 response, 40 CFR 122.45(c) requires that effluent limitations for metals be expressed as total recoverable, it does grant an exception if the permit writer expresses a metal's limit in another form (*e.g.,* dissolved, specific valence, or total). That is, the NPDES regulations give flexibility for the permit writers to develop criteria that would be the most appropriate and protective of water quality. As noted above, the CTR's guidelines note that dissolved metal criteria are recommended over total criteria because it most closely models the actual risk to the environment. In a total metal analysis, the collected water sample is mixed with a 1:1 dilution of acids and "cooked down" with heat. Any solid particulates in the total metal sample would get dissolved in this strongly acidic and heated process. These laboratory induced acidic conditions are rare in naturally occurring water bodies, and definitely do not exist in the Pajaro River. Thus, the total metal samples tend to drastically over estimate the concentrations of metal in the water. In the natural world, such particulates would settle out and pose little risk to organisms; as written in the CTR, total metal analyses do not accurately assess real risk to beneficial uses. This position has also already been accepted by the Board, as the previous permit's mercury limit was in dissolved form, not total form.

Further, the NPDES regulations allow for the use of dissolved metal criteria if an effluent guideline specifies the limitation in another form of the metal. The effluent limits specified in the CTR are in dissolved form, not total, and Graniterock believes that any WQBEL established in this permit should be consistent with the guidelines established in the CTR. Thus, because the NPDES regulations allow for it, the past permit included it, the CTR recommends it, and because it is the most scientifically defensible, Graniterock requests that metal criteria be expressed in dissolved forms.

We thank you and the Board for your assistance in preparation of this Order and look forward to working with you in these matters. Graniterock recognizes that there are numerous issues that remain unresolved, and we believe that the questions surrounding Water Quality Based Effluent Limits, dilution credits, intake credits, and metal forms are of paramount importance. We again request that you delay the hearing so that we can finalize the issues we have been unable to fully address.

If you have any questions or require additional information, please do not hesitate to contact me at (831) 768-2009 or by e-mail at tlau@graniterock.com.

Sincerely,

Tina Lau

Environmental Specialist

Sustainable Resource Development

GRANITE ROCK COMPANY

III. SANTA CRUZ COUNTY – COMMENT LETTER MAY 11, 2010

County of Santa Cruz

DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060-4070
(831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

JOHN J. PRESLEIGH
DIRECTOR OF PUBLIC WORKS

May 11, 2010

ROGER BRIGGS, EXECUTIVE DIRECTOR
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

SUBJECT: ORDER NO. R3-2010-0025 DRAFT WASTE DISCHARGE REQUIREMENTS FOR GRANITE ROCK AUTHUR WILSON QUARRY, SAN BENITO COUNTY, NPDES PERMIT NO. CA0005274

Dear Mr. Briggs:

This letter responds to Public Notice Draft WDR R3-2010-0025 (Comments due: May 13, 2010, Hearing date: July 8, 2010) wherein the Granite Rock Company (Discharger) has applied to the California Regional Water Quality Control Board (RWQCB) to renew a National Pollutant Discharge Elimination System (NPDES) permit to discharge treated wastewater and storm water runoff from the Arthur R. Wilson Quarry into the Pajaro River. The Discharger is requesting water releases to occur at river stages up to 31.3 feet measured at the Pajaro River Chittenden Gauge (at Chittenden); however, 31.3 feet at Chittenden is grossly above the Flood Warning Stage of 25 feet at Chittenden. Prior NPDES permit conditions prohibited discharges into the Pajaro River when the stage was above Flood Warning level.

Flood thresholds for the Pajaro River at Chittenden are as follows: 32 feet = Flood Stage; 25 feet = Flood Warning Stage; 23 feet = Flood Watch Stage. The Flood Watch Stage of 23 feet triggers the ALERT monitoring system alarm. Given these thresholds, it is evident that no discharge should be allowed above the Flood Watch Stage of 23 feet. In fact, discharge should be prevented at levels well below this threshold. Accordingly, 31.3 feet exceeds the danger zone and should be revised to a threshold of well below 23 feet.

Public Works requests that you do not approve the renewal of this permit and reconsider a much lower discharge threshold for a revised application. With this letter we are notifying our Flood Control District Board Chairman, County Administrative Officer, and County Counsel of your proposed actions.

The downstream end of the Pajaro River is bounded by 12.5 miles of levees that run along the boundary line between Santa Cruz and Monterey Counties. Built in 1949, the levees are over 60 years old. Though built with the intention of containing a 50-year flood, and a 100-year flood with encroachment into freeboard, the U.S. Army Corps of Engineers has determined that the current level of flood protection provided by the levees is only an 8-year storm (with 90 percent confidence).

A Federal project to reconstruct the levees is currently in the planning and environmental review phases. Until new levee construction is completed, the area is drastically under protected from potential flood devastation. The flood of March 1995, recorded at stage 32.2 feet, broke the levees and resulted in at least one death. Hundreds of families were displaced from their homes for months, and local businesses suffered severe financial losses. Urban damages were estimated to be $28 million. The flood destroyed hundreds of farming operations and covered over 3,300 acres of agricultural land. Crop damages were estimated at $67 million. The 1995 flood caused over $95 million in total economic loss to the community. Subsequent flooding in February 1998 caused millions of dollars of additional damages. With such vastly undersized levees, it is dangerous to approve the release of additional discharges into the Pajaro River when the river stage is already above Flood Warning Stage. For this reason, we strongly oppose even a de minimis discharge at levels approaching 23 feet, as those flows would exacerbate dangerous water levels, volumes, and velocities.

Per the Order within Section III. Discharge Prohibitions, Item F, "The discharge shall not cause or contribute to downstream flooding within the Pajaro River." For you to approve release of additional flows into the Pajaro River, 0.7 feet below Flood Stage as proposed, directly violates Item F. Furthermore, discharge at river stage elevations near and above Flood Warning Stage, would, in our opinion, make both the Regional Board and Granite Rock liable for potential damages resulting from flood events.

Of special note, the County of Santa Cruz wrote similar legal notice in a letter to Roger Briggs from our Director, dated May 10, 2005, in reference to RWQCB Order No. R3-2005-0044. In reference to the same order number, the County of Monterey also gave similar legal notice to you with these concerns in a letter to Roger Briggs from Curtis Weeks, General Manager of the Monterey County Water Resources Agency, dated May 12, 2005.

Despite our protests, the RWQCB chose to approve the Arthur R. Wilson Quarry 's discharges at that time. As this matter is again being considered presently, we are repeating our request that you deny this application. Your assistance in cooperating with this request is sincerely appreciated.

Yours truly,

JOHN J. PRESLEIGH
Director of Public Works

By: Bruce Laclergue

Bruce Laclergue
Flood Control Program Manager

BLC:mh
Copy to: Tony Campos, Chairman, Zone 7 Board of Directors
Susan Mauriello, County Administrative Officer
Dana McRae, County Counsel
Monterey County Water Resources Agency
City of Watsonville Public Works
granitearthurwilsonmh.wpd

IV. MONTEREY COUNTY WATER RESOURCES AGENCY – COMMENT LETTER MAY 13, 2010

MONTEREY COUNTY

WATER RESOURCES AGENCY

PO BOX 930
SALINAS , CA 93902
(831)755-4860
FAX (831) 424-7935

CURTIS V. WEEKS
GENERAL MANAGER

STREET ADDRESS
893 BLANCO CIRCLE
SALINAS, CA 93901-4455

May 13, 2010

Mr. Roger Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-5411

Re: Tentative Draft of Waste Discharge Requirements Order No. R3-2010-0025, National Pollution Discharge Elimination System (NPDES) Permit No. CA0005274 – Granite Rock Company, Inc. – Arthur R. Wilson Quarry, San Benito County, WDID 3 3552000001

Dear Mr. Briggs,

Our Agency has become aware that Regional Board staff is considering reissuing Granite Rock Company, Inc., Arthur Wilson Quarry's Waste Discharge Requirements (Order No. R3-2005-0044) to make discharges into the Pajaro River at stages above flood warning level. As we understand it, this would allow discharge of facility process water into the Pajaro River at river stage elevations (measured at Chittenden) above flood warning level. Prior to Order R3-2005-0044, conditions prohibited discharges into the river when stage was above flood warning level.

A few facts that you may not be aware of: Granite Rock proposes allowing discharges from their facility up to River Stage 31.3. Flood Stage is 32.0.

- Alert Stage is every major storm in the watershed, regardless of stage
- Monitoring Stage is 25 feet
- Flood Stage is 32 feet
- At 31.3 it is probable that the town of Pajaro and portions of Watsonville would have already been evacuated
- At 31.3 the Corps of Engineers and/or DWR will likely be on site for a flood fight
- At 31.3 the river banks are eroding
- At 31.3 adding any additional flow to the River is counter productive to the flood fight efforts taking place near Pajaro and Watsonville

The safe design capacity of a levee calls for 3 feet of free board – or 29 feet in this case. Any additional flow above 29 feet would add to the risk to life and property in Pajaro and Watsonville and increase the probability of levee failure or over topping.

At 25 feet – river monitoring stage – crews form Monterey County and Santa Cruz County are already patrolling the levees looking for trouble areas. Any flow above this stage is recognized as a potential risk to life and property.

From a water quality standpoint having a levee over top or fail will result in significant erosion of the farm fields. That eroded material will ultimately end up in the Pajaro River. That seems to be a policy counter to the mission of the SWRCB.

Given the events of 1995 and 1998 it would seem that a Corporate Citizen of the Pajaro Valley and a State Agency would choose a safer operating practice that minimizes the risks to life and property along the lower Pajaro River.

As you may be aware, Monterey County, Santa Cruz County, and the State of California were deemed to have substantial liability for flood damage from 1995 floods. For that reason alone we strongly oppose even a de minimis discharge that could exacerbate dangerous water levels, volumes or velocities.

The levees in the Pajaro River Flood Control project area below Chittenden are over 50 years old. Under these circumstances, we would expect the Regional Board and Granite Rock to assume full liability in potential damages arising from such a decision.

In addition to prohibiting any discharge at or above flood warning levels, our Agency would recommend that any order approved by your Board also incorporate a requirement that down stream public agencies be notified prior to proposed releases scheduled when Chittenden stage levels are within two feet of flood warning stage.

Your assistance in cooperating with this request is greatly appreciated.

Sincerely,

by Wm. L. Phillips, Dep. Gen.

Curtis V. Weeks
General Manager

V. CENTRAL COAST WATER BOARD PETITION RESPONSE LETTER AUGUST 4, 2005

California Regional Water Quality Control Board
Central Coast Region

Alan C. Lloyd, Ph.D.
Secretary for Environmental Protection

Internet Address: http://www.waterboards.ca.gov/centralcoast
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

TO: Marleigh Wood
Office of the Chief Counsel
SWRCB

SWRCB/OCC FILE A-1702

FROM: Roger W. Briggs
Executive Officer

DATE: August 4, 2005

SUBJECT: **PETITION OF MONTEREY COUNTY WATER RESOURCES AGENCY AND COUNTY OF SANTA CRUZ (WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2005-0044 [NPDES NO. CA0005274] FOR ARTHUR R. WILSON QUARRY), CENTRAL COAST REGION: PETITION RESPONSE**

Enclosed are the following in response to the County of Santa Cruz and Monterey County Water Resources Agency Petitions for Review:

1. August 4, 2005, Central Coast Regional Water Quality Control Board Memorandum - Petition Response
2. Master Index and Administrative Record

Please call Matthew Keeling at (805) 549-3685 or Regional Board Counsel, Lori Okun at (916) 341-5165 if you have any questions regarding this matter.

S:\NPDES\NPDES Facilities\San Benito Co\Arthur Wilson Quarry\Appeal A-1702\A-1702 petition transmittal.DOC

cc; with enclosure 1 only:

Mr. Tom Bolich
County of Santa Cruz
Department of Public Works
701 Ocean Street, Room 410
Santa Cruz, CA 95060

Ms. Lori Okun, Esq.
Office of Chief Counsel
State Water Resources Control Board
1001 I Street, 22nd Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100

Ms. Dana McRae, Esq.
Office of County Counsel
County of Santa Cruz
701 Ocean Street, Suite 505
Santa Cruz, CA 95060-4068

Mr. Charles McKee, Esq.
County of Monterey
168 W. Alisal, 3rd Floor
Salinas, CA 93902

Mr. Aaron Johnston-Karas
Granite Rock Company
P.O. Box 50001
Watsonville, CA 95077

Mr. Curtis Weeks
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

Ms. Katharine Wagner, Esq.
Downey Brand
555 Capitol Mall, 10th Floor
Sacramento, CA 95814

California Regional Water Quality Control Board
Central Coast Region

Alan C. Lloyd, Ph.D.
Secretary for Environmental Protection

Internet Address: http://www.waterboards.ca.gov/centralcoast
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

Via Facsimile (916) 341-5199 and U.S. Mail

TO: Marleigh Wood
Office of the Chief Counsel
SWRCB

FROM: Roger W. Briggs
Executive Officer

DATE: August 4, 2005

Signature: _____

SUBJECT: PETITION OF MONTEREY COUNTY WATER RESOURCES AGENCY AND COUNTY OF SANTA CRUZ (WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2005-0044 [NPDES NO. CA0005274] FOR ARTHUR R. WILSON QUARRY), CENTRAL COAST REGION: PETITION RESPONSE
SWRCB/OCC FILE A-1702

The Monterey County Water Resources Agency and County of Santa Cruz (Petitioners) filed petitions (received June 14, 2005, and June 13, 2005, respectively) for review of the Central Coast Regional Water Quality Control Board's (Central Coast Water Board) Order (Waste Discharge Requirements Order No. R3-2005-0044) allowing Granite Rock Company, Inc. (Granite or Discharger) to discharge aggregate processing wastewater and storm water to the Pajaro River from the Arthur R. Wilson Quarry facility (Facility).

The Petitioners question the appropriateness of allowing controlled releases to the Pajaro River when river flows are at or above the flood monitor stage of 25 feet and request that discharges from the Facility be restricted to a Pajaro River stage of up to 24 feet corresponding to a river flow of 6,004 million gallons per day (MGD). The Petitioners' supporting argument is the poorly maintained downstream flood control project and the 1995 flood event that caused extensive property damage. As a result of the 1995 flood, the Petitioners incurred significant financial liability for not aggressively managing the flood control project. Central Coast Water Board staff considered downstream flooding issues when preparing the Order and the Order adopted by the Central Coast Water Board contains discharge prohibitions that restrict discharges to prescribed discharge and Pajaro River flows and prohibits surface-water discharges from causing or contributing to flooding within downstream portions of the Pajaro River. The administrative record supports the Central Coast Water Board's findings that the discharge will not contribute to flood stage water levels. The Order is sufficiently protective of water quality and will prevent the discharge from causing or contributing to flooding on downstream reaches of the Pajaro River. These issues are discussed in more detail below.

This memorandum is broken down into three main sections, consisting of a factual summary, response to petition, and summary and conclusions. The factual summary provides background information about the Facility operations and discharge, Department of Water Resources flow gauging and stage definitions, the Central Coast Water Board's action; and the evidence supporting the Central Coast Water Board's action. Each of the Petitioners' comments is addressed in the response to petition section, followed by a summary and conclusions.

This memorandum transmits the Master Index by Reference (Attachment A) for this case. We sent the administrative record to you under separate cover on August 4, 2005

FACTUAL SUMMARY

Facility Background

The Discharger owns and operates a granite quarry and aggregate processing Facility adjacent to the Pajaro River and State Route 129. The Facility covers approximately 1,570 acres and has been in operation since 1900. The Discharger mines, processes, and stockpiles granite rock aggregates at the Facility, which are used as basic construction materials and as feed materials in on-site and off-site asphalt and concrete manufacturing plants. Process water is used in the wet processing plant to wash the aggregates to remove sand and fine silt and clay particles (fines). The process water is collected, treated to remove sand and fines, and is stored in the Quarry Storage Reservoir (Reservoir) for reuse in the wet processing plant. This is a closed-loop process water circuit that maximizes recycling and minimizes the use of makeup water from the Facility water supply well (Orchard Well). The Reservoir covers approximately 10 acres and can hold about 200 million gallons of water depending on freeboard and depth of sediment. One foot of freeboard in the Reservoir can contain approximately 3.5 million gallons (10 acre-ft) of excess storage. The Discharger generally operates the Reservoir with approximately two to two and one half feet of excess freeboard.

The Facility's process water circuit recycles process water between the wet processing plant and the Reservoir. As part of the process water circuit the Discharger also operates a 92-acre settling basin known as the Soda Lake Facility, located across the Pajaro River, for the removal and storage of fines. Prior to recycling, process water effluent from the aggregate washing operations is treated in a fines treatment plant to remove sand and fines. The fines treatment plant consists of a primary clarifier and five meshed-belt filter presses. Sand recovered from the wet processing facility effluent is stockpiled and sold as product and the suspended solids are either pumped as a slurry to the Soda Lake Facility or are mixed with overburden to be used in site reclamation activities. The clarified process water flows back to the Reservoir for reuse, but can also be pumped to the Soda Lake Facility settling basin if additional storage is required. The Reservoir also provides additional settling/treatment and accumulated sediment is periodically dredged from the Reservoir and pumped to the Soda Lake Facility to maintain sufficient capacity in the Reservoir. Although the primary purpose of the Soda Lake Facility is to provide storage of the recovered fines, it also provides process water storage and storm water retention for the water circuit. Clarified process water from the slurry, stored process water, and storm water retained at the Soda Lake Facility are directed back to the Reservoir via a gravity flow pipe as needed for reuse.

The Facility borders an approximately 2.6-mile reach of the Pajaro River (approximately 1.4 miles upstream and 1.2 miles downstream of the discharge point). Prior to 2000 the Facility had five storm water discharge points to the Pajaro River. All but two of the discharge points have been eliminated; one storm water discharge point was retained along with the process water/storm water Discharge Point 001 subject to the Order and discharge in question. The Facility also has a series of three storm water retention ponds tributary to the remaining storm water discharge point. Storm water discharges from the Facility's remaining storm water discharge point are regulated by General NPDES Permit No. CAS000001 (Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities). However, some site storm water enters the process water circuit as a result of storm water runoff from various processing and stockpile areas tributary to the Reservoir, and storm water that falls on the Reservoir and Soda Lake Facility settling basin. Storm water retained in the Facility's storm water retention ponds is also periodically used to supplement process water in the Reservoir on a seasonal and as needed basis to offset the use of makeup water from the Orchard Well.

Discharges from the Reservoir to the Pajaro River occur at Discharge Point 001. Process water/storm water is pumped from the surface of the Reservoir to a concrete reinforced bank that serves to dissipate energy and minimize erosion during discharge events. Discharges to the Pajaro River from the Reservoir are seasonal and intermittent and occur only as a result of heavy and/or prolonged rainfall events that generate storm water volumes in excess of the process water circuit storage capacity. Consequently, discharges from the Reservoir are essentially storm water discharges mixed with recycled process water and makeup groundwater. As a result of the Facility's ability to store and recycle process water and retain storm water tributary to the process water circuit, there are infrequent discharges of process water from the Facility.

From 2000 through 2004, discharges from the Reservoir only occurred during fifteen days between December 1, 2001, and January 3, 2002, and for approximately 25 days during the first quarter of 2000. The 2001/2002 discharge event occurred during a Pajaro River stage range, as measured at Chittenden Station, of approximately 9 to 12 feet, corresponding to river flows of approximately 412 MGD to 931 MGD, respectively (See discussion of gauging information and stage definitions below). The maximum recorded Pajaro River stage during the first quarter of 2000 was approximately 20.2 feet, corresponding to a river flow of approximately 3,748 MGD (USGS National Water Information System). These discharges were required as a result of cumulative rainfalls of 3.6 and 3.4 inches at the Facility over relatively short time periods (eight and thirteen days, respectively). No other discharges from the Reservoir have occurred since 2000 and discharges prior to 2000 are not well documented.

Pajaro River Flow Gauging Information and Stage Definitions

The United States Geological Survey (USGS) and Department of Water Resources (DWR) Division of Flood Management operate and maintain a gauging station (Chittenden Station) on the Pajaro River located at Chittenden Crossing. The Facility discharge location to the Pajaro River, identified as Discharge Point 001, is approximately one and one half miles downstream of Chittenden Station.

The term "stage" refers to the depth of flow at a specified point in the river (gauging station), but is sometimes used to refer to the actual river flow as determined by the gauging station for that depth.

The term 'Project' refers to a flood control project area for which federal authorization (Flood Control Act) provides for the installation, modification or extension of levees for flood protection. The federal 1966 Flood Control Act project provides for modification and extension of the existing levees along the lower 12.5 miles of the Pajaro River and along tributaries to increase flood protection to the Pajaro Valley area. The federal 1944 Flood Control Act project provided for levees in the Watsonville and Gilroy areas.

DWR has identified and uses two stages to define and monitor potential flooding conditions within gauged rivers and streams. The two stages, "monitor stage" and "flood stage" are defined below and have different definitions depending on whether or not the river or stream is leveed.

Monitor Stage
Non-Leveed Stream - The Stage at which initial action must be taken by concerned interests (livestock warning, removal of equipment from lowest overflow areas, or simply general surveillance of the situation). This level may produce overbank flows sufficient to cause minor flooding of low-lying lands and local roads.

Leveed Stream - The Project Stage at which patrol of flood control project levees by the responsible levee maintaining agency becomes mandatory, or the Stage at which flow occurs into bypass areas from project overflow weirs.

Flood Stage
Non-Leveed Stream - The Stage at which overbank flows are of sufficient magnitude to cause considerable inundation of land and roads and/or threat of significant hazard to life and property.

Leveed Stream - The Project Stage at which the flow in a flood control project is at maximum design capacity (U.S. Corps of Engineers "Project Flood Plane"). At this level there is a minimum freeboard of 3 feet to the top of levees.

The DWR also defines a "danger stage" as the following for Project areas:
Danger Stage - The Stage at which the flow in a flood control project is greater than maximum design capacity and where there is extreme danger with threat of significant hazard to life and property in the event of levee failure. This is generally one foot above project flood stage.

The DWR monitor stage and flood stage for the Pajaro River as measured at Chittenden Station are 25 feet and 32 feet, respectively. Corresponding Pajaro River flows at these stages are 6,785.9 MGD (10,500 cfs) and 13,765.6 MGD (21,300 cfs), respectively. Attachment B presents the DWR stages with respect to historic Pajaro River flow data from January 1990 to September 2003. In addition, the flow-stage rating curve for the Pajaro River at Chittenden Station is presented in the record along with the tabular data used to generate the curve. Although DWR does not indicate whether the monitor and flood stages for the Pajaro River pertain to non-leveed or leveed Project values, it is assumed they are for leveed conditions given the 1944 and 1996 Flood Control Act projects for the Pajaro River.

Central Coast Water Board Action

Central Coast Water Board staff sent the draft Order and associated documents to the Discharger, Petitioners, and other interested parties on April 25, 2005. The draft Order contained Discharge Prohibition III.3 (please note that the outline numbering of the public comment draft Order was incorrect and should have read, III.J) requiring that:

> "The discharge of facility process water from the Quarry Storage Reservoir to the Pajaro River shall only occur when Pajaro River flows are below 6,004 MGD (corresponding to a California Department of Water Resources flood monitor stage of 25 feet) as measured at the Chittenden gauging station."

No comments were received from the Petitioners in response to the April 25, 2005 draft Order. Based on additional discussion between staff and the Discharger and additional review of the Discharger's March 17, 2005 comment letter regarding this prohibition, staff proposed changing the prohibition (Discharge Prohibition III.H as presented in the May 13, 2005 agenda package) to the following:

> "The discharge of facility process water from the Quarry Storage Reservoir to the Pajaro River shall only occur when Pajaro River flows are below ~~6,004~~ 13,766 MGD (corresponding to ~~a~~ the California Department of Water Resources flood ~~monitor~~ stage of ~~25~~ 32 feet) as measured at the Chittenden gauging station."

The proposed change was presented in a supplemental sheet prepared on May 5, 2005. Central Coast Water Board staff sent the supplemental sheet to the Petitioners and other interested parties prior to the hearing. The County of Santa Cruz contested the proposed increase in the allowable Pajaro River flow discharge window in a letter dated May 10, 2005, and provided testimony during the May 13, 2005 hearing. After considering the information and testimony presented during the hearing, the Central Coast Water Board adopted the Order with a Pajaro River flow limit of 13,000 MGD. Discharge Prohibition III.H of the final Order reads as follows:

> "The discharge of facility process water from the Quarry Storage Reservoir to the Pajaro River shall not occur when Pajaro River flows are greater than 13,000 MGD (corresponding to a Pajaro River stage of approximately 31.3 feet) as measured at the Chittenden gauging station."

According to Item No. 9 of the Monterey County Water Resources Agency (MCWRA) Petition, its May 12, 2005 letter of protest (Attachment 2 to the MCWRA Petition) was hand delivered to Central Coast Water Board staff on May 12, 2005. The letter was reportedly faxed to the Watsonville City Council Chambers for delivery to staff at the May 12-13, 2005 hearing being held in Watsonville. We have no record of receiving the MCWRA May 12, 2005 letter contesting the proposed changes to Discharge Prohibition III.H and requesting the item be rescheduled to another date. In addition, no one from the MCWRA appeared at the May 13, 2005 hearing to provide testimony in opposition to the discharge prohibition.

Evidence Supporting Central Coast Water Board Action

The Central Coast Water Board acknowledges that flooding within the Pajaro Valley is a real concern and recent flooding events, particularly the 1995 floods, have resulted in significant property damage. The Central Coast Water Board is required to consider the need to prevent nuisance when issuing waste discharge requirements. (CWC §13263(a).) As such, the Central Coast Water Board considered flooding issues when preparing the Order and it is the Central Coast Water Board's intent, as specified in the Order, to limit discharges so they do not contribute to downstream flooding. The Order contains the following discharge prohibitions for the discharge of process water/storm water from the Reservoir that are intended to prevent downstream impacts on flooding:

F. The discharge shall not cause or contribute to downstream flooding within the Pajaro River.

G. The flow rate of the discharge of facility process water from the Quarry Storage Reservoir to the Pajaro River shall not exceed 9.0 MGD.

H. The discharge of facility process water from the Quarry Storage Reservoir to the Pajaro River shall not occur when Pajaro River flows are greater than 13,000 MGD (corresponding to a Pajaro River stage of approximately 31.3 feet) as measured at the Chittenden gauging station.

Although a nine MGD discharge to the Pajaro River during flood conditions would result in nearly negligible increases in river flow, as discussed in more detail below, any discharge flow to the Pajaro River from the Facility during downstream flood conditions may be considered a contributing factor to flooding regardless of the relative flow contribution. Consequently, Discharge Prohibitions III.F, III.G and III.H were added to the Order to ensure that discharges do not occur at Pajaro River flows above the DWR flood stage of 13,766 MGD (32 feet) and to prohibit the discharge from causing or contributing to downstream flooding. Discharges from the Facility are restricted to Pajaro River flows of up to 13,000 MGD, and discharges occurring when Pajaro River flows exceed this limit will subject the Discharger to enforcement.

The Discharger argued in response to the draft Order that water from the supply well does not meet the Order's effluent limits for TDS, chloride, sodium, boron, and mercury, and that the lower Pajaro River flow limit of 6,004 MGD would require more frequent discharges and the increased use of water from the water supply well. Regardless of how much groundwater is used in the process water circuit, the discharge must still meet the effluent limitations and receiving water limitations within the Order, which are protective of the Pajaro River. The need for more frequent use of groundwater is considerably lessened with a Pajaro River flow limit of 13,000 MGD. Also, a need to develop and use recycled water exists within the region. The Discharger operates a recycled water system that allows it to reuse process water and storm water and use less groundwater. If Prohibitions III.F through III.H result in the Discharger having to discharge more frequently, the Discharger will recycle less water and use more groundwater to make up the imbalance. The Discharger could avoid this by increasing storage capacity to contain all storm water generated on the site. However, the Discharger testified that it would hypothetically cost $1.6 million to acquire additional land for storage, but that no such land is available. Even if more frequent discharges (and less recycling) were necessary, there would still be a need to

prevent the discharge from causing or contributing to downstream flooding. The Discharger also testified that more frequent discharges would result in incrementally higher monitoring costs associated with more frequent effluent and receiving water sampling as required by the Order.

CENTRAL COAST WATER BOARD RESPONSE TO PETITION

Petition Summary and Response Format

The two Petitions are virtually identical except for a few minor differences in wording and format that do not vary the Petitioners' arguments and statements regarding the discharge prohibition in question. As such, the Central Coast Water Board is responding to the two Petitions collectively. The Petitioners' key arguments and statements are excerpted below in bold text and quotation marks, not necessarily in the order they appear in the Petitions, and will be addressed individually in the following discussion. The Petitioners' statements are also identified by the Item No. pertaining to the section in which they appear within the Petitions.

Petition Arguments and Central Coast Water Board Response

The primary argument in Item No. 4 of both Petitions is that the Central Coast Water Board's May 13, 2005 Order is **"inappropriate and improper because the Counties with responsibility for flood prevention believe it to be bad policy and precedent to allow controlled releases, regardless of the discharge quantity, to enter into the Pajaro River Flood Control Project when the river is at flood warning stage or higher as monitored at the Chittenden gage."** Consequently the Petitioner's specific action requested in Item No. 6 is that **"the State Water Board restore Discharge Prohibition III.H to the flow discharge window to a stage of equivalent to 6,004 MGD as measured at the Chittenden gage and as cited in the April 25, 2005 staff report."**

As noted above, the Order prohibits discharges when the Pajaro River flow is greater than 13,000 MGD. This is just below the flood stage of 13,766 MGD. It is assumed the Petitioners use the term "flood warning stage" to represent the "monitor stage" as utilized by DWR. The DWR began using the term "monitor stage" in place of "warning stage" on or around October 1, 2000.

The originally proposed Pajaro River flow limit of 6,004 MGD, corresponding to a river stage of 24 feet (one foot below the monitor stage), was derived from Order No. R3-2004-0099 for the upstream discharge of tertiary treated domestic wastewater from the South County Regional Wastewater Authority (SCRWA) wastewater treatment plant and was based on an evaluation conducted by Montgomery Watson Harza (Effluent Management Plan – South County Regional Wastewater Authority, May 2004 Final Report) in response to downstream stakeholder concerns. The SCRWA discharge point to the Pajaro River is approximately nine miles upstream from the Facility and Chittenden Station. Santa Cruz County recently petitioned Order No. R3-2004-0099 in part with regard to flooding concerns (SWRCB/OCC File A-1670). Specifically, Santa Cruz County requested that the upper Pajaro River flow discharge limit for the SCRWA discharge of nine MGD be reduced from a Pajaro River flow of 6,004 MGD (stage of 24 feet) to 2,779 MGD (stage of 18 feet) as measure at Chittenden. As in the prior petition, Santa Cruz County is now requesting the Pajaro River flow limit for the discharge in question be reduced to 6,004 MGD

without any supporting technical documentation. Santa Cruz County's petition of the SCRWA Order was dismissed on June 6, 2005.

Staff's initial intent in applying the 6,004 MGD Pajaro River discharge limit was to remain consistent with the Pajaro River flow limits of Order R3-2004-0099 (Discharge Specifications for Tertiary Effluent Disposal E.3) for all Pajaro River discharges. However, the Facility is notably different from the SCRWA facility with regard to the nature of the discharge, available storage capacity, discharger's ability to time discharges, and location of the discharge. In addition, the lower flow limit would have had adverse water quality impacts (see below), which was not the case at the SCRWA facility. Consequently, upon further consideration, Central Coast Water Board staff concluded that an adjustment of the Pajaro River flow limit was warranted to account for these differences. The Board agreed.

Petitioners' requested reduction in the Pajaro River flow discharge prohibition to 6,004 MGD would make it more difficult for the Discharger to manage the process water circuit and reduce the amount of process water and storm water reuse and may necessitate regular discharges throughout the wet season in anticipation of unforeseen and significant rainfall events. Historically the Facility has been able to restrict discharges to storm events significant enough to produce storm water volumes that exceed the excess capacity of the process water circuit, but that have not coincided with receiving water flows above the initially proposed 6,004 MGD limit as noted above in the facility background discussion. Altering the management of the Facility's process water circuit through more frequent discharges would reduce the amount of process water and storm water retained for reuse and could require the Discharger to utilize more groundwater from its water supply well and subject the Discharger to an increased risk of effluent and surface water limit violations. Groundwater from the Orchard Well used as make up process water supply is generally of poorer water quality than water retained in the Reservoir due to storm water inputs to the process water circuit. Process water, Pajaro River, and Orchard Well sampling data presented in the Discharger's report of water discharge and self monitoring reports indicate that groundwater from the Orchard Well is typically of poorer quality than the process water and receiving water with respect to mercury, total dissolved solids, chloride, sulfate, boron, and sodium and that groundwater quality exceeds the effluent and surface water limitations contained within the Order for these constituents.

The increase in the allowable Pajaro River flow discharge window to just below the DWR flood stage was intended to eliminate the need for more frequent discharges by the Discharger in anticipation of unforeseen significant storm events and emergency discharges at or above flood stage. An increased potential for emergency discharges during Pajaro River flows above flood stage could result from the formerly proposed Pajaro River flow limit of 6,004 MGD unless the Discharger scheduled discharges every wet season to increase the available amount of excess storage in anticipation of unforeseen significant storm events. However, it is still not certain whether regular discharges would completely eliminate the need for emergency discharges during flooding conditions. Consequently, the formerly proposed Pajaro River flow limit of 6,004 MGD could conceivably result in more frequent discharges to the Pajaro River and an increased risk of emergency discharges above flood stage that could theoretically cause or contribute to downstream flooding. More simply stated, the previously proposed prohibition language may have precluded discharges during Pajaro River flows below flood stage to avoid emergency discharges above flood

stage. The Central Coast Water Board maintains that Discharge prohibitions III.F through III.H adequately address potential nuisance conditions as a result of flooding while increasing the allowable discharge window based on Pajaro River flows.

The Petitioners provide no factual or technical information in support of their arguments that it is "inappropriate and improper" and "bad policy and precedent" to allow controlled releases to the Pajaro River at or above the monitor stage and for the request to reduce the Pajaro River flow discharge window to 6,004 MGD. In addition, the Petitioners provide no information that controlled releases to the Pajaro River above the monitor stage have caused or contributed to or will cause or contribute to downstream flooding. In fact, the Petitioners' statements excerpted below indicate that downstream flooding is a result of the poorly managed, aged and broken levee system that currently provides an inadequate level of protection to handle flood stage flows.

According to the Petitioners' statements in Item No. 5 of the Petitions, **"The levees are aged, have broken and been repaired previously and plans are underway for the reconstruction to a higher level of protection. The Counties of Santa Cruz and Monterey are responsible for public health and safety relative to flood prevention activity and have been successfully sued for not pursuing a course of action that included greater efforts and a more aggressive approach to overcoming funding and regulatory obstructions."**

Item No. 7 of the Petitions further states, **"Over the years, Pajaro River flooding has caused extensive damage to property, most recently in 1995. The [Petitioners] make year round efforts to reduce the chance that damaging floods occur. As a result of the 1995 flood, [the Petioners] incurred more that twenty million dollars ($20,000,000) in liability. [The Petitioners] must take all steps necessary to assure that such flood event does not occur in the future."**

These statements are the Petitioners' rationale for petitioning the Order, but provide no factual or technical information implicating controlled releases in causing or contributing to downstream flooding. In fact, these statements imply that the risk of downstream flooding has resulted from the *Petitioners'* historical failure to manage and maintain levees within the flood control project for which they are responsible, and not from the Discharger's proposed activities. There is a complete lack of factual and technical evidence in the Petitions, or elsewhere in the administrative record, supporting the arguments in favor of a request for a lower Pajaro River flow limit. Petitioners appear to be motivated not by policy or science, but the need to establish a record of opposing controlled discharges to the flood control project as part of a more aggressive course of action with regard to any controllable contributions to Pajaro River flows.

Flooding of the Pajaro River downstream of Chittenden Station has occurred historically as a result of the significant areal extent of the tributary watershed upstream of Chittenden Station, severe storm events within upstream portions of the watershed, and the poor condition of the existing flood control projects, and not as a result of the nearly negligible contributions of flow from controlled releases to the Pajaro River. Consequently, any such future flooding will occur regardless of, and not as a result of, controlled releases as long as the downstream flood control project remains in poor condition and is inadequate to handle flood stage flows as noted in the

Petitioners' arguments. However, even in the unfortunate event that flooding does occur, any contribution from the Discharger's activities would be negligible.

The Petitioners state in Item No. 4 that: **"Options were discussed at the Regional Board hearing wherein real-time weather data could be obtained or weather forecasting consultant services could be obtained to help the discharger in decisions relative to managing on-site storm water runoff and/or managing the frequency of discharging facility process water from the Quarry Storage Reservoir. The option to dredge sediments in the Quarry Storage Reservoir and thereby restore reservoir capacity was also discussed and discounted but is thought to have been under-explored in County staff's opinion."** It is further indicated in Item No. 5 of the Petitions that, **"It is also County staff's opinion that the options discussed in response to item 4 above** [excerpted above] **are a reasonable course of conduct which could be approached by the discharger if the allowable discharge window was restored to the condition as stated in the Regional Board's April 25, 2005 staff report."**

Regardless of whether the Pajaro River flow discharge window upper limit is reduced from 13,000 MGD to the formerly proposed limit of 6,004 MGD, it will still be in the Discharger's best interest to make use of real time weather data and forecasting and to implement management strategies to maximize available Reservoir storage capacity in an effort to comply with the discharge prohibitions of the Order. Although the Order does not specifically require the Discharger to implement weather forecasting and real time links to Chittenden Station gauging data, the use of these types of tools are inherent in the Discharger's ability to remain in compliance with the Order and have not been discounted as suitable management strategies regardless of the Pajaro River flow limit. The Central Coast Water Board's position on this issue is typified by the following statement excerpted from the staff response to the Discharger's comment no. 8 found in the Fact Sheet attached to the Order:

> "The inherent difficulties in predicting significant storm events and relying on frequently unavailable Chittenden gauging station data to manage the recycled water system and remain in compliance with a Pajaro River flow discharge prohibition will likely require creative management strategies by the Discharger."

The Discharger manages the process water circuit with approximately two feet to two and one half feet of freeboard in the Reservoir. This provides an excess storage capacity within the Reservoir to contain approximately seven million gallons of storm water. The Discharger testified at the hearing that the total amount of storage is also affected by the amount of accumulated sediment in the Reservoir and that the sediment is regularly dredged from the Reservoir to maintain capacity. However, the Discharger also testified that more frequent dredging of the Reservoir could potentially violate the 24-hour emission limits in the facility's Title V Federal Air Permit, which limits the amount of time the dredge-pump diesel motor can operate in combination with other Facility equipment. As to whether additional storage capacity could be added to the Facility to limit discharges, the Discharger testified that it would be cost prohibitive to acquire additional land for storage, and that no such land is currently available anyway.

Item No. 7 of the Petitions state, **"Because of the potential for significant delays in the time of transport of floodwaters in the Pajaro River, the [Petitioners] request that additional margins of safety be included in the Order. The staff report states that the Dischargers intend to cease discharging when the Pajaro River flow reaches a level of 32 feet of 13,000 MGD. A detailed analysis of flow frequencies in relation to the flow triggers was not completed by the Discharges or the Regional Board staff."**

In addition to this statement, Santa Cruz County testified that the travel time from Chittenden Station to Watsonville is approximately one to one and one half hours based on average river flows and that an approximately 100 square mile drainage area contributes to the flow of the Pajaro River downstream of Chittenden Station. Historical Pajaro River flood flows have primarily originated in the upper reaches of the approximately 70 mile long San Benito River, which can contribute over half of the flow measured at Chittenden Station. Santa Cruz County testified that travel times from the upper reaches of the San Benito River to Chittenden are approximately 30 hours. Santa Cruz County further testified that the Uvas, Llagas and Pacheco Creek drainage areas tributary to the upper reaches of the Pajaro River also contribute significant flows as measured at Chittenden station and that travel times from these areas can range from approximately nine to fourteen hours. Based on Central Coast Water Board staff review of the watershed with regard to the nine MGD discharge, flow contributions to the Pajaro River downstream of Chittenden Station are relatively insignificant when compared to the flow contributions from upstream portions of the watershed. Central Coast Water Board staff testified at the hearing that the drainage area upstream of Chittenden Station is approximately 1,186 square miles, whereas the drainage area downstream of Chittenden to Salsipuedes Creek in Watsonville is about 86 square miles and comprises approximately 6.8% of the total drainage area upstream from that point (see Attachment C). Based on the relative watershed areas and travel times, discharges from the facility occurring below the flood stage as measured at Chittenden will not be likely to contribute to flooding since additional flows to the Pajaro River downstream of Chittenden will be relatively insignificant as compared to upstream contributions that have yet to pass Chittenden Station. In addition, any discharges to the Pajaro River prior to flood stage conditions will likely travel past Watsonville and on to the Pacific Ocean well before flood stage flows from upper portions of the watershed have a chance to reach portions of the Pajaro River downstream of Chittenden Station. As previously noted, discharge point 001 is only 1.5 miles downstream of Chittenden Station. The close proximity of the Facility discharge point to Chittenden Station eliminates the uncertainty of peak river flow lag times and will allow the Discharger to more accurately gauge river flows as they pass by the facility and time discharges so as to not cause or contribute to river flows above flood stage.

Although a detailed analysis of flow frequencies in relation to the flow triggers was not conducted, both the Discharger and the Central Coast Water Board staff did evaluate historic river flow data to estimate Pajaro River flow and water level (stage) increases resulting from the discharge, and historical storm event and discharge data for the Facility to predict future discharge scenarios.

Comparison of the discharge and receiving water flows indicates the relative flow contribution of nine MGD from the discharge is relatively insignificant and will be virtually impossible to detect within downstream portions of the Pajaro River. Even if the maximum allowable discharge flow

of nine MGD were to occur at flood stage, its contribution would be negligible. At the flood stage elevation of 32 feet as measured at Chittenden Station, corresponding to a Pajaro River flow of approximately 13,766 MGD, a discharge flow of nine MGD would constitute a flow contribution of approximately 0.07%. For a nine MGD discharge, Pajaro River flows of 6,004 MGD and 13,000 MGD correspond to Pajaro River flow to effluent flow ratios of approximately 667:1 (0.15 %) and 1,444:1 (0.07%), respectively. The corresponding increase in water level would be virtually undetectable anywhere downstream of the discharge. Interpolation of the Pajaro River Chittenden Station flow-stage rating curve indicates that a river flow increase of nine MGD due to the maximum proposed effluent discharge would result in an increase in water level of approximately 0.15 inches at Pajaro River flows of 6,004 MGD and 0.083 inches at Pajaro River flows of 13,766 MGD.

Cumulative impacts from controlled releases were discussed at the hearing. The only permitted non-storm water controlled release upstream of the Facility discharge point and Chittenden Station is from the SCRWA facility as mentioned above. In addition, there are no other permitted non-storm water controlled releases downstream of the Facility discharge. As such, the nine MGD flow contribution from SCRWA will be accounted for in the measurement of Pajaro River flow upstream of the Facility and any additional downstream contribution from storm water runoff is unlikely to cause downstream flows in excess of flood stage given the limited areal extent of the watershed tributary to downstream portions of the Pajaro River as noted above.

Given the extent of the watershed area tributary to portions of the Pajaro River upstream of the Facility discharge point and variability in storm intensity and location, it is virtually impossible to correlate Pajaro River flows at Chittenden Station with potential discharge conditions at the Facility. Discharge conditions at the Facility are generally independent of storm conditions in other portions of the watershed and Pajaro River flows measured at Chittenden Station. The frequency and duration of the discharge is dependent on the amount of available excess storage capacity within the Reservoir and Soda Lake Facility and the spacing, frequency and intensity of storm events at the Facility and are therefore very difficult to predict with any accuracy. Based on historical discharge events, future discharge events can be conservatively projected to occur once per year lasting 3 – 4 days with a maximum daily (eight hour work day) discharge of 7 – 8 million gallons (see section II.C of EPA Form 2C/NPDES). Although the rate of discharge is expected to be the same for any given discharge event due to discharge pump flow limitations, the amount of available storage in the process water circuit and runoff conditions during any given storm event(s) will dictate the timing and duration of discharges. Storms of different duration, intensity and/or recurrence interval can produce very different runoff conditions at the Facility. As discussed in the Facility Background discussion above, the two discharges from the Facility in the last five years have resulted from cumulative rainfall events at the Facility approaching four inches. However, these rainfall events did not result in discharges during Pajaro River stage levels in excess of 20.2 feet (3,748 MGD) or during documented flooding events in downstream portions of the Pajaro River. Undocumented discharge data available prior to 2000 are sporadic and inconclusive as to whether discharges occurred during the 1995 and 1998 documented flooding events.

In addition, a conservative storm water runoff analysis provided by the Discharger (see May 11, 2005 email regarding "Storm water runoff analysis"; this was also included in the Discharger's testimony at the hearing) indicates a nine MGD controlled discharge of process water/storm water from the Reservoir would be less than the estimated amount of storm water runoff from portions of the watershed tributary to the existing discharge point for undeveloped (natural) site conditions. As such the Discharger has mitigated the flow of storm water runoff from the Facility through operation of the process water circuit.

Based on the above discussion, a detailed analysis of flow frequencies in relation to the flow triggers as suggested by the Petitioners was not warranted because:

1. The relatively insignificant threat of the discharge causing or contributing to downstream flooding
2. The Order's prohibition of discharges above Pajaro River flows approaching the flood stage
3. The relatively insignificant flow and stage contribution from the discharge
4. The proximity of the discharge point to Chittenden Station
5. The limited areal extent of the watershed tributary to the Pajaro River downstream of Chittenden Station
6. The fact that the controlled discharge will likely be less than the amount of storm water runoff from the Facility area under natural conditions.

Notwithstanding a detailed analysis of the flow frequencies and triggers, the evidence did not show that the relative reduction of incremental risk from a discharge that would constitute less than 0.15% of the total flow in the Pajaro River at flows above 6,004 MGD would be significant enough to warrant limiting the upper Pajaro River flow trigger to 6,004 MGD. Therefore, the discharge specifications contained within the Order are sufficiently protective and a reduction in the upper flow limit is not warranted.

Item No. 7 of the Petitions state, **"As an operator of the downstream flood control improvements, [the Petitioners] need notification of when additional CONTROLLED DISCHARGES will take place. As caretaker and representative of down stream interests, [the Petitioners] also needs to receive and evaluate all relevant water quantity data from upstream tributaries and other discharges to the Pajaro River to ensure that downstream interests are adequately protected."** Item No. 9 of the Santa Cruz County Petition further states, **"The issue regarding providing notice of discharges to the County of Santa Cruz was raised before the Regional Board. The County's request would assist the County of Santa Cruz prior to and during future potential flood events of the Pajaro River."**

The Petitioners did not raise these issues before the Central Coast Water Board (see CD audio of Central Coast Water Board Meeting, May 13 2005 – Watsonville, Item #22 – Arthur Wilson Quarry) and provides no reason for not doing so. This contention is untimely (23 Cal.Code of Regs. §2050(a)(9).) However, the Central Coast Water Board does not object to the request for notification.

SUMMARY/CONCLUSIONS

The Central Coast Water Board must protect water quality and associated beneficial uses. The evidence in the record supports the Central Coast Water Board's findings that the discharge prohibitions within the Order are sufficiently protective of water quality and associated beneficial uses of receiving waters. In addition, the discharge prohibitions are sufficiently protective to prevent potential nuisance conditions. To wit, they prevent the discharge from causing or contributing to flooding within downstream portions of the Pajaro River. The Discharger has consistently operated the Facility process water circuit in a manner that limits discharges of process water and storm water to the Pajaro River and maximizes the reuse of process water and storm water. Additional restrictions and requirements beyond those that already exist in the Order would require the Discharger to discharge more frequently and supplement the process water supply with poorer quality groundwater that does not meet the effluent and receiving water limitation of the Order. In addition, a lower Pajaro River flow limit would not necessarily prevent discharges from contributing to downstream flows above flood stage even if more frequent discharges are required to comply with the Order. The Petitioner provides no sound technical basis for its arguments and approval of the Petitioner's requests would be unreasonably burdensome on Discharger with very little, if any, benefit to water quality or flood prevention. Consequently, the Order in question is consistent with the maximum benefit of the people of the state, will not contribute to downstream flooding or unreasonably affect present and anticipated beneficial uses of such water, and will not result in water quality less than that prescribed in water quality policies, including plans.

The administrative record supports the Central Coast Water Board's findings that the discharge will not contribute to flood stage water levels and that the Order specifically prohibits the discharge from causing or contributing to downstream flooding. The Order includes discharge prohibitions that restrict discharges to prescribed discharge and Pajaro River flows and prohibits surface-water discharges from causing or contributing to flooding within downstream portions of the Pajaro River.

The Central Coast Water Board requests the SWRCB to uphold the Order.

Attachments:

A. Master Index by Reference
B. Figure – Pajaro River Flow Data and Flow Triggers (USGS Chittenden Gauging Station – January 1990 to September 2003) (Power Point figure used during May 13, 2005 meeting)
C. Pajaro River Watershed Map (Power Point figure used during May 13, 2005 meeting)

S:\NPDES\NPDES Facilities\San Benito Co\Arthur Wilson Quarry\Appeal A-1702\A-1702 petition resp memo final.DOC

MASTER INDEX
ADMINISTRATIVE RECORD
SWRCB/OCC FILE A-1702

PETITION OF MONTEREY COUNTY WATER RESOURCES AGENCY AND COUNTY OF SANTA CRUZ (WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2005-0044 [NPDES NO. CA0005274] FOR ARTHUR R. WILSON QUARRY), CENTRAL COAST REGION: PETITION RESPONSE

Date	Type: Engineering Reports/Correspondence Subject	To	Author
Volume 1			
(General Correspondence and Engineering Reports)			
5/31/2005	Instructions to Applicant for Waste Discharge Requirements (public notice confirmation with copy of published notice)	Matt (Keeling), RWQCB	Rebecca (Hager), Granite Rock
5/25/2005	Letter re: Transmittal of Waste Discharge Requirements Order No. R3-2005-0044, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0005274 - Granite Rock Company, Inc. - Arthur R. Wilson Quarry, San Benito County, WDID 3 352000001	Aaron Johnston-Karas (Granite Rock)	RWQCB Staff
Attachment to above letter	Waste Discharge Requirements Order No. R3-2005-0044, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0005274 - Granite Rock Company, Inc. - Arthur R. Wilson Quarry, San Benito County, WDID 3 352000001 (adopted May 13, 2005)	Adopted Order Granite Rock	RWQCB Staff
5/23/2005	Supplemental Sheet for Regular Meeting of May 12-13, 2005 (Prepared May 23, 2005 as revised at the hearing); Item Number 22; Subject: Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0005274 for Granite Rock Company, Inc., Arthur Wilson Quarry, San Benito County, Order No. R3-2005-0044	Prepared to clarify the record following the hearing	RWQCB Staff
5/13/2005	Audio CD: Audio recording of Central Coast Water Board Meeting, May 13, 2005 - Watsonville, Item 22 - Arthur Wilson Quarry		
5/13/2005	Power Point slides used by RWQCB staff at the May 13, 2005 meeting		Matt Keeling, RWQCB
5/12/2005	Email Re: Storm water runoff analysis	Matt Keeling, RWQCB	Aaron Johnston-Karas, Granite Rock
5/11/2005	Email Re: Storm water runoff analysis with attached 5/11/2005 discussion and Runoff Coefficient Calculations table	Matt Keeling, RWQCB	Tina Lau, Granite Rock
5/11/2005	Supplemental Sheet for Regular Meeting of May 12-13, 2005 (Prepared May 11, 2005); Item Number 22; Subject: Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0005274 for Granite Rock Company, Inc., Arthur Wilson Quarry, San Benito County, Order No. R3-2005-0044	Interested Parties List for Granite Rock Arthur Wilson Quarry	RWQCB Staff
5/10/2005	Letter re: Supplemental Amendment to Item 22, Discharge Prohibition III.H, Arthur Wilson Quarry	Roger Briggs, RWQCB	Bruce Laclergue, County of Santa Cruz

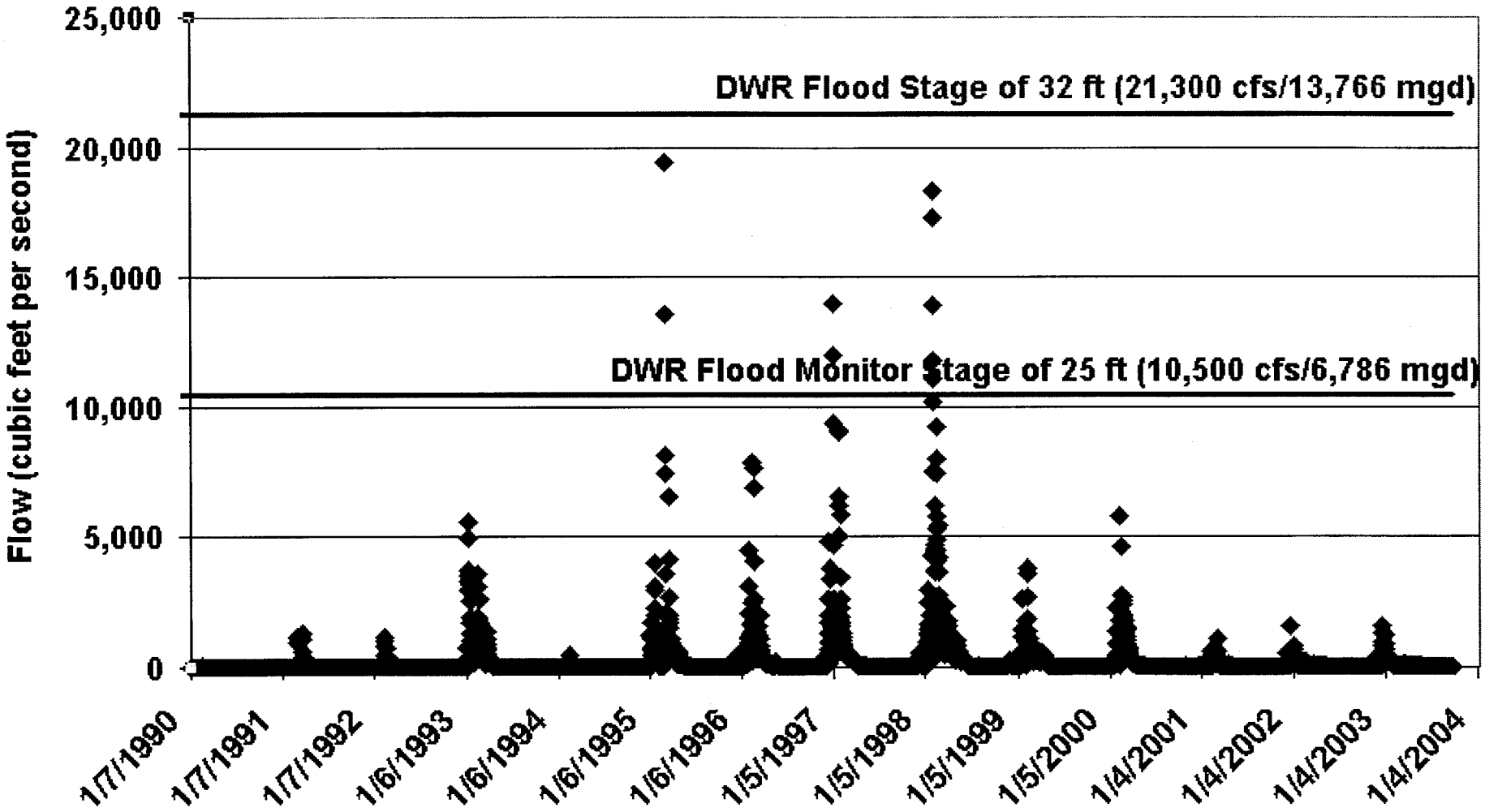
Date	Type: Engineering Reports/Correspondence Subject	To	Author
	Volume 1 (Continued)		
5/5/2005	Supplemental Sheet for Regular Meeting of May 12-13, 2005 (Prepared May 5, 2005); Item Number 22; Subject: Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0005274 for Granite Rock Company, Inc., Arthur Wilson Quarry, San Benito County, Order No. R3-2005-0044	Interested Parties List for Granite Rock Arthur Wilson Quarry	RWQCB Staff
4/28/2005 (mailed)	Notice of Public Meeting, Central Coast Regional Water Quality Control Board Meeting, Thursday and Friday, May 12-13, 2005	Interested Parties List for Granite Rock Arthur Wilson Quarry	RWQCB Staff
4/15/2005	Staff Report for Regular Meeting of May 12-13, 2005 (Prepared May 15, 2005); Item Number 22; Subject: Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0005274 for Granite Rock Company, Inc., Arthur Wilson Quarry, San Benito County, Order No. R3-2005-0044	Interested Parties List for Granite Rock Arthur Wilson Quarry	RWQCB Staff
4/15/2005	Waste Discharge Requirements Order No. R3-2005-0044, NPDES No. CA0005274 (revised February 4, 2005 public comment draft), Proposed for Consideration at the May 12-13, 2005 public meeting	Final (second) Draft of Order for 5/12-13/05 Meeting	RWQCB Staff
3/17/2005	Letter re: Comments on Draft Order No. R3-2005-0044, NPDES No. CA0005274	Matt Keeling, RWQCB	Tina Lau, Granite Rock
3/17/2005	Email re: 011005 results data.xls with attached Excel spreadsheet of Quarry Reservoir and Pajaro River sampling data (hard copies of analytical data reports with QA/QC to follow)	Matt Keeling, RWQCB	Rebecca Hager, Granite Rock
3/17/2005	Hard copies of analytical data reports with QA/QC for October 2004 sampling event (follow up to previous email)	Matt Keeling, RWQCB	Various Laboratories
2/16/2005	Letter re: Graniterock A.R. Wilson Quarry Draft Permit Comment Permit No. CA0005274	Matt Keeling, RWQCB	Aaron Johnston-Karas, Granite Rock
2/4/2005	Transmittal letter of: Tentative Draft of Waste Discharge Requirements Order No. R3-2005-0044, National Pollutant Discharge Elimination System Permit No. CA0005274 for Granite Rock Company, Inc., Arthur Wilson Quarry, San Benito County, WDID 3 352000001	Aaron Johnston-Karas (Granite Rock)	RWQCB Staff
2/4/2005	Waste Discharge Requirements Order No. R3-2005-0044, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0005274 - Granite Rock Company, Inc. - Arthur R. Wilson Quarry, San Benito County, WDID 3 352000001 (February 4, 2005 Public Comment Draft)	Attached to above transmittal; sent to Interested	RWQCB Staff
2/2/2005	Email re: Graniterock (responses to request for clarification)	Matt Keeling, RWQCB	Scott Keen, Tetra Tech
2/2/2005	Email re: Graniterock (responses to request for clarification)	Matt Keeling, RWQCB	Scott Keen, Tetra Tech

Date	Type: Engineering Reports/Correspondence Subject	To	Author
	Volume 1 (Continued)		
1/10/205	Letter re: 12/29/04 RWQCB notice of violation letter	Roger Briggs, RWQCB	Aaron Johnston-Karas, Granite Rock
12/29/2004	Notice of Violation - September 13, 2004 Inspection; Granite Rock Company Arthur Wilson Quarry, San Benito County (NPDES No. CA0005274, WDR Order No. 00-007)	Aaron Johnston-Karas (Granite Rock)	RWQCB Staff
12/22/2004	Letter re: Renewal of NPDES Permit No. CA0005274 and Report of Waste Discharge for Granite Rock Company's A.R. Wilson Quarry and Soda Lake facilities in San Benito County	Matt Keeling, RWQCB	Rebecca Hager, Granite Rock
	Volume 2		
	(General Correspondence and Engineering Reports)		
11/24/2004	Renewal of NPDES Permit No. CA0005274 and Report of Waste Discharge for Granite Rock Company's A.R. Wilson Quarry and Soda Lake facilities in San Benito County	Roger Briggs, RWQCB	Granite Rock
11/8/2004	Draft NPDES Compliance Evaluation Inspection (CEI) reports	Harvey Packard, RWQCB	Wesley Ganter, Tetra Tech
7/27/2004	Letter re: Granite Rock Company, Arthur Wilson Quarry - Soda Lake Facility Expansion, San Benito County; Response to Waiver Request	Aaron Johnston-Karas (Granite Rock)	RWQCB Staff
7/20/2004	Letter re: Granite Rock Company, Arthur Wilson Quarry, San Benito County; Data Requirements for Permit Reissuance	Rebecca Hager, Granite Rock	Matt Keeling, RWQCB
7/15/2004	Letter re: Request for Waiver of Waste Discharge Requirements under Section A, General Waiver Conditions, of Resolution R3-2002-0115 for the groundwater collection and bypass around the Soda Lake expansion project	Matt Keeling, RWQCB	Aaron Johnston-Karas, Granite Rock
6/21/2004	Letter re: Graniterock A.R. Wilson Quarry WDR 00-007	Matt Keeling, RWQCB	Rebecca Hagar, Granite Rock
4/20/2004	Letter re: Graniterock A.R. Wilson Quarry WDR 00-007	Matt Keeling, RWQCB	Aaron Johnston-Karas, Granite Rock
2/9/2004	Letter re: Granite Rock Company, Arthur Wilson Quarry, San Benito County; Response to Report of Waste Discharge	Benjamin Licari, Granite Rock	RWQCB Staff
9/22/2003	Letter/Transmittal re: Application for Revision of Waste Discharge Requirements Order No. 00-007	Matt Keeling, RWQCB	Benjamin Licari, Granite Rock
9/1/2003	Granite Rock Company Soda Lake Facility, Report of Waste Discharge Requirements	Matt Keeling, RWQCB	Resource Design Technology, Inc.
4/17/2003	Letter re: Action Plan for Soda Lake Pipe	Matt Keeling, RWQCB	Aaron Johnston-Karas, Granite Rock
3/17/2003	Letter re: Notice of Violation - Process Water Spill; Granite Rock Company, Arthur Wilson Quarry, San Benito County	Aaron Johnston-Karas, Granite Rock	RWQCB Staff

Date	Type: Engineering Reports/Correspondence Subject	To	Author
	Volume 2 (Continued)		
2/6/2003	Letter re: Graniterock Company, A.R. Wilson Quarry, San Benito County, Waste Discharge Requirements/NPDES Permit No. 000-07	Matt Fabry, RWQCB	Aaron Johnston-Karas, Granite Rock
1/13/2003	Facsimile re: A.R. Wilson Facility spill report (spill report attached)	Matt Fabry, RWQCB	Aaron Johnston-Karas, Granite Rock
11/21/2002	Email re: Sampling for 2003, WDR/MRP 00-007	Matt Fabry, RWQCB	Aaron Johnston-Karas, Granite Rock
5/3/2002	Letter re: Graniterock Company, A.R. Wilson Quarry, San Benito County, Waste Discharge Requirements/NPDES Permit No. 000-07 and Industrial Storm Water Permit	Matt Fabry, RWQCB	Aaron Johnston-Karas, Granite Rock
7/25/2001	Letter re: Alteration to Method of Discharge, Arthur Wilson Quarry, San Benito County; Waste Discharge Requirements Order No. 00-007	Aaron Johnston-Karas, Granite Rock	RWQCB Staff
7/10/2001	Letter re: Graniterock Company, A.R. Wilson Quarry, San Benito County, Waste Discharge Requirements/NPDES Permit No. 000-07	Roger Briggs, RWQCB	Aaron Johnston-Karas, Granite Rock
2/26/2001	Letter re: Granite Rock Company A.R. Wilson Quarry, Water Discharge Investigation, Discharge Order 00-007	Matt Fabry, RWQCB	Aaron Johnston-Karas, Granite Rock
2/5/2001	Letter re: Granite Rock Company A.R. Wilson Quarry, Notice of Water Discharge, Discharge Order 00-007	Matt Fabry, RWQCB	Robert DuPuy, Granite Rock
5/19/2000	Waste Discharge Requirements Order No. 00-007, NPDES Permit No. CA0005274, Waste Discharger Identification No. 3 352000001 for Granite Rock Company, Inc., Arthur R. Wilson Quarry, San Benito County	Granite Rock	RWQCB Staff
1/1/1985	California Regional Water Quality Control Board Central Coast Region, January, 1985, Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits	Attached to WDR/NPDES permit above	RWQCB staff
	Volume 3		
	(SCRWA Documents & USGS Chittenden Flow-Stage Rating Curve)		
10/5/2004	Letter re: Transmittal of Waste Discharge Requirements Order No. R3-2004-0099, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0049964 - South County Regional Wastewater Authority, Santa Clara County, WDID 3 430100001	John Ricker, County of Santa Cruz	RWQCB Staff
5/20/2004	Transmittal of revised Figure 1-A for Effluent Management Plan (see report below)	MWH	RWQCB Staff
5/6/2004	Report: Effluent Management Plan - South County Regional Wastewater Authority, Final Report May 2004	MWH	Submitted to RWQCB
No date	Flow-Stage Rating Curve for Pajaro River at Chittenden Gage Station (Excel table, plot, and data spreadsheet used to evaluate Pajaro River flows and stage)		USGS

Date	Type: Engineering Reports/Correspondence Subject	To	Author
	Volume 4		
	(Discharger Monitoring Reports)		
4/20/2005	Graniterock A.R. Wilson Quarry 1st Quarter 2005 Monitoring Report, WDR 00-007	RWQCB	Rebecca Hager, Granite Rock
1/25/2005	Graniterock A.R. Wilson Quarry 4th Quarter 2004 and annual 2004 Monitoring Reports, WDR 00-007	RWQCB	Rebecca Hager, Granite Rock
10/18/2004	Graniterock A.R. Wilson Quarry 3rd Quarter 2004 Monitoring Report, WDR 00-007	RWQCB	Rebecca Hager, Granite Rock
7/13/2004	Graniterock A.R. Wilson Quarry 2nd Quarter 2004 Monitoring Report, WDR 00-007	RWQCB	Rebecca Hager, Granite Rock
4/20/2004	Graniterock A.R. Wilson Quarry 1st Quarter (2004) Monitoring Report, WDR 00-007	RWQCB	Rebecca Hager, Granite Rock
1/28/2004	Graniterock A.R. Wilson Quarry 4th Quarter 2003 and annual 2003 Monitoring Reports, WDR 00-007	RWQCB	Rebecca Hager, Granite Rock
10/23/2003	Graniterock A.R. Wilson Quarry 3rd Quarter 2003 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
7/29/2003	Graniterock A.R. Wilson Quarry 2nd Quarter 2003 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
4/28/2003	Graniterock A.R. Wilson Quarry 1st Quarter 2003 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
2/6/2003	Graniterock A.R. Wilson Quarry 4th Quarter 2002 and annual 2002 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
10/31/2002	Graniterock A.R. Wilson Quarry 3rd Quarter 2002 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
7/31/2002	Graniterock A.R. Wilson Quarry 2nd Quarter 2002 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
4/30/2002	Graniterock A.R. Wilson Quarry 1st Quarter 2002 Monitoring Report, WDR 00-007	RWQCB	Aaron Johnston-Karas, Granite Rock
1/25/2002	Graniterock A.R. Wilson Quarry 4th Quarter 2001 and annual 2001 Monitoring Reports, WDR 00-007	RWQCB	Aaron Johnston-Karas, Granite Rock
10/26/2001	Graniterock A.R. Wilson Quarry 3rd Quarter 2001 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
7/31/2001	Graniterock A.R. Wilson Quarry 2nd Quarter 2001 Monitoring Report, WDR 00-007	RWQCB	Ben Inkster, Granite Rock
4/30/2001	Graniterock A.R. Wilson Quarry 1st Quarter 2001 Monitoring Report, WDR 00-007	RWQCB	Robert DuPuy, Granite Rock
1/31/2001	Graniterock A.R. Wilson Quarry 4th Quarter 2000 and annual 2000 Monitoring Reports, WDR 00-007	RWQCB	Robert DuPuy, Granite Rock
10/31/2000	Graniterock A.R. Wilson Quarry 3rd Quarter 2000 Monitoring Report, WDR 00-007	RWQCB	Robert DuPuy, Granite Rock
8/3/2000	Graniterock A.R. Wilson Quarry 2nd Quarter 2000 Monitoring Report, WDR 00-007	RWQCB	Robert DuPuy, Granite Rock
4/21/2000	Graniterock A.R. Wilson Quarry 1st Quarter 2000 Monitoring Report, WDR 00-007	RWQCB	Aaron Johnston-Karas, Granite Rock
2/1/2000	3 Species Bioassay Results: Samples Received 24-28 January 2000		Toxscan, Inc
1/19/2000	Graniterock A.R. Wilson Quarry 3rd and 4th Quarter 1999 Monitoring Report, WDR 00-007	RWQCB	Tony Warman, Granite Rock

Pajaro River Flow Data and Flow Triggers
(USGS Chittenden Gauging Station - January 1990 to September 2003)



Pajaro River Watershed